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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,029	08/02/2000	Laszlo Arato	60705-1320	8405
7590	04/06/2005		EXAMINER	
Thomas Kayden Horstemeyer & Risley LLP 100 Galleria Parkway Suite 1750 Atlanta, GA 30339			AHN, SAM K	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/632,029

Applicant(s)

ARATO ET AL.

Examiner

Sam K. Ahn

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-29 and 48-58 is/are allowed.
- 6) ☒ Claim(s) 1,13-16,30 and 42-45 is/are rejected.
- 7) ☒ Claim(s) 2-12,17-18,31-41 and 46-47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,13-16,30 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hui et al., USP 6,198,749 B1 (Hui) in view of Kawano et al., USP 5,933,605 (Kawano).

Regarding claims 1 and 30, Hui teaches a communication system (see Fig.4) comprising: a customer interface (27) configured to supply an upstream data transmission and receive a downstream data transmission; and a plurality of modems (26) in communication with the customer interface via a first data transmission link, the plurality of DSL transceivers in communication with a respective modem at a central office (60) via respective transmission lines, wherein each of the plurality of DSL transceivers is configured to receive a downstream data stream and to transmit and upstream data stream, the upstream data transmission configured for distribution across the plurality of modems, the plurality of modems further configured to generate the downstream data transmission from the plurality of downstream data streams (note col.6, lines 20-38).

Although, Hui does not explicitly teach wherein the modems are DSL transceivers, it would have been obvious to one skilled in the art at the time of the invention to implement using DSL modems for the purpose of further increasing the data rate, wherein DSL lines are known to support higher data rate than analog lines.

However, Hui does not further teach wherein the plurality of DSL transceivers are in communication with each other via a plurality of DSL transceiver data transmission links.

Kawano teaches (see Fig.1) plurality of computers (201,202,207) comprising transceivers (note col.6, lines 30-32), coupled to an interface (5) and further communicating with each other via transmission line (4). Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Hui's teaching by connecting the modems together as taught by Kawano for the purpose of communicating data between the modems, thus include a function of routing and transferring (note col.6, lines 15-18).

Regarding claims 13 and 42, Hui teaches means for communicating (27) with customer premises equipment to receive an upstream data transmission, means for distributing (lines coupling from 27 to 26) a portion of the received upstream data transmission to each of a plurality of communication links for transmission, means for receiving (26) a portion of a downstream data transmission distributed across each of the plurality of communication links, means for combining (27) the

portions of the downstream data transmission such that the downstream data transmission is reconstructed, and means for communicating (27) the reconstructed downstream data transmission to the customer premises equipment.

Although, Hui does not explicitly teach wherein the modems are DSL transceivers, it would have been obvious to one skilled in the art at the time of the invention to implement using DSL modems for the purpose of further increasing the data rate, wherein DSL lines are known to support higher data rate than analog lines.

Regarding claims 14 and 43, Hui in view of Kawano teach all subject matter claimed, as applied to claim 13 or 42. Hui further teaches wherein the means for receiving (26) a portion of a downstream data transmission is accomplished via a plurality of transceiver (transceivers within the modem) dedicated to receive the portion of a downstream data transmission from a predetermined remote DSL transceiver (60).

Regarding claims 15-16 and 44-45, Hui in view of Kawano teach all subject matter claimed, as applied to claim 13. Kawano, as explained previously teaches the limitation of plurality of transceivers serially connected (see 201,202,207 in Fig.1).

Allowable Subject Matter

2. The indicated allowability of claims 1-58 is withdrawn in view of the newly discovered reference(s) to Hui et al., USP 6,198,749 B1 (Hui) in view of Kawano et al., USP 5,933,605 (Kawano).
3. Claims 19-29 and 48-58 are allowed.
4. Claims 2-12,17-18,31-41 and 46-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam K. Ahn
4/4/05


TEMESGHEN CHEBRETNSAE
PRIMARY EXAMINER